## **Cropland CMT Questions**

Answer 1 set of questions for each management area in your operation. Areas with the same crop rotation and tillage can be grouped together, even if they are not in the same crop in the same year. Examples:

2 tracts with 1 in corn and 1 in bean, both using a corn/bean rotation with the same tillage is 1 set of questions

2 tracts with 1 on a corn on corn rotation and the other using a corn/bean rotation is 2 sets of questions.

Rotation and	l Adjacent Hal	bitat Inf	formation
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1	Enter the length of your rotation or management system in "years".  Example: A corn, soybean rotation = 2. A continuous Corn rotation = 1.	
2	Enter the number of your harvested crops that are included in each of the categories below (a-e).  Do not include cover.  Example: For a corn and soybean rotation, enter 1 in 2c (for beans) and 1 in 2d (for corn).	
	a) bare fallow crop periods (both chemical and tilled fallow), idle bare fields, or harvested sod.	
	b) Asparagus, Beans dry edible, Beets, Broccoli, Cabbage, Carrots, Strawberries, Vegetables, or similar crops.	
	c) Buckwheat, Canola, Corn or sorghum silage, Cotton, Flaxseed, Safflower, <b>Soybeans</b> , or similar crops.	
	d) Corn Grain/Popcorn, Cranberries, Rice, Small Grains, Sorghum, or similar crops.	
	e) Grass Hay/Seed, Legume Hay /Seed, or similar herbaceous perennial crops.	
3	Enter the number of times during your rotation that you plant a cover crop that you do not harvest. For a permanent crop enter the percentage (expressed as a decimal number) of the time you maintain cover between the row.	
4	Enter the number of different crop species/types in your rotation or management system, including different types of cover crops.  A corn, soybeans rotation would be 2  A continuous corn rotation would be 1  A corn, soybean rotation with an alfalfa cover crop on both the corn and bean = 3.	
5	Do you have cropland acres that you flood during the winter for wetland wildlife?	Yes/No
6	Does your rotation include hay or other grass or legume cover? If No go to 7	Yes/No
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7	Do you have any areas such as field borders, filter strips, buffers, odd areas, windbreaks, wetlands, brushy draws, hedgerows, seeps, shallow water areas, riparian areas, vegetated ditches, CRP land, native vegetated communities, center pivot corners or other similar areas that provide wildlife habitat within or adjacent to your cropland? You must own or control these areas.	Yes/No If NO go to 8
7.1	From the choices below (a-c) select the answer that best describes the plants growing on these areas within or adjacent to the crop/hay field.	
	a) Less than 33% of the vegetation is native or introduced species that provide food and cover to wildlife, pollinators, and beneficial insects.	
	b) 33-67% vegetation is native or introduced species that provide food and cover to wildlife, pollinators, and beneficial insects.	
	c) More than 67% is native or introduced species that provide food and cover to wildlife, pollinators, and beneficial insects.	
7.2	From the choices below (a-d) select the answer that best describes the AMOUNT of suitable wildlife habitat within or adjacent to the crop/hay field.	
	a) Habitat is less than 1% of the crop/hay field.	
	b) Habitat is between 1% and 5% of the crop/hay field.	
	c) Habitat is between 6% and 10% of the crop/hay field.	
	d) Habitat is more than 10% of the crop/hay field.	
7.3	From the choices below (a-d) select the answer that best describes the WIDTH of wildlife habitat within or adjacent to the crop/hay field (must be at least 0.1 acre or more)	•
	a) less than 30 feet wide	
	b) 30 to 75 feet wide	
	c) 76 to 120 feet wide	
	d) more than 120 feet wide	
7.4	How far is the wildlife habitat from the center of the crop/hay field?	
	a) Average distance from the center of the field to the habitat is more than 1320 feet	
	b) Average distance from the center of the field to the habitat is 660 to 1320 feet	
	c) Average distance from the center of the field to the habitat is 330 to 660 feet	
	d) Average distance from the center of the field to the habitat is less than 330 feet	
8	Do you purposely leave unharvested crops in the field for wildlife food/cover on an annual basis?	Yes/ No
	Choose the answer below (a-d) that best describes how much you leave.	
	a) $1/4 - 1$ acre of food plot or unharvested grain per 40 acres of cropland (minimum 30 feet wide and next to noncrop cover).	
	b) > 1 acre of food plot or unharvested grain per 40 acres of cropland (minimum 30 feet wide and next to noncrop cover).	

water	r Conservation and Residue Management	T
9	Before field operations, do you check soil moisture by methods such as moisture-by-feel or more sophisticated methods to minimize soil compaction?	Yes/ No
10	Do you consistently use controlled traffic methods (either GPS or manual methods) to minimize soil compaction?	Yes/ No
11	Answer each of the questions below (a-f) about your residue management and/or tillage system:	
	a) Enter the number of crops in your rotation that have full width tillage, deeper than 4 inches that involves soil inversion and lifting (such as plows or deep disking).	
	b) Enter the number of crops in your rotation that have full width tillage, deeper than 4 inches that involves soil fracturing and lifting (such as subsoilers, rippers, or paraplows).	
	c) Enter the number of crops in your rotation that have full width tillage performed after harvest and leaves more than 30% residue cover (tillage that is less than four inches deep such as a light disk or field cultivator). Does not include seedbed preparation immediately prior to planting a cover crop.	
	d) Enter the number of crops in your rotation for which you use conservation tillage and maintain at least 30% soil cover after planting (includes mulch tillage). This includes crop residues, cover crops, composts or other natural mulch.	
	e) Enter the number of crops in your rotation using a no till/strip till system with at least 50% residue cover after planting.	
	f) Enter the number of crops in your rotation for which you use a no till/strip till system that maintains at least 75% residue cover after planting. For systems using perennials with no tillage after year of establishment, include the number of years of perennials.	
12	From the choices below (a-e) select the answer that best describes the average condition of crop residues left in the field during the winter, for wildlife cover. If none of these apply, select none. Corn/soybean rotation with corn stalks tilled in the fall and soybean stubble left undisturbed = A	
	a) Fall tillage, undisturbed soybean residue or any kind of harvested silage	
	b) Crop residue chopped or shredded with no soil disturbance or grasses/legumes are included in the rotation and cover the field during winter	
	c) Crop residues are gleaned by livestock but no mechanical disturbance of residue or soils	
	d) Crop residue, grain stubble, hay/forage crop, or cover crop left standing overwinter, height is less than 8 inches	
	e) Crop residue, grain stubble, hay/forage crop, or cover crop left standing overwinter, height is over 8 inches	

## **Erosion & Runoff Information** 13 Is your crop or hayland managed so there are no signs of erosion or gullies after a heavy Yes/No rainfall, significant snowmelt, or irrigation? Select any of the following practices that are applied on your crop or hayland acres: 14 contour farming (330) contour orchard or other fruit area (331) contour strip cropping (585) windbreaks (380) terraces (600) diversions (362) hillside ditch (423) grassed waterways (412) grade stabilization structure (410) contour buffer strips (332)

herbaceous wind barriers (603)

cross wind trap strips (589C)

Pest Management Information		
15	Do you apply any pesticides on your crop or hayland acres?	Yes/No
		If No go to 16
15.1	From the questions below select the choice (a-c) that best describes how you manage pests on your crop or hayland acres.	
	a) Pesticides are applied without documenting the pest population densities and locations.	
	b) Some components of an IPM system are utilized, such as using pest-free seeds and transplants, cleaning tillage and harvesting equipment between fields, using pest-resistant varieties, crop rotation, trap crops, pest scouting, biological pest controls, spot spraying, banding, directed spraying, manual removal, and scheduling irrigation to avoid disease development.	
	c) A full IPM system is utilized with scouting and economic thresholds to manage pests and reduce pest management environmental risk, utilizing pest suppression techniques (including pesticide applications) only after monitoring (including pest scouting) verifies that a pest population has reached an economic threshold.	
15.2	Do you use an environmental risk screening tool (such as WIN-PST or similar) to reduce pesticide risk to soil and water resources?	Yes/No

## **Nutrient Management Information**

16	Do you apply any fertilizers or manure on your crop or hayland acres?	Yes/No
		If No Finished
16.1	Do you apply manure, compost, or other organic amendment to meet (but not exceed) crop nutrient needs?	Yes/No
16.2	Do you soil test (or tissue test for orchards, vineyards, or other permanent crops) on all crop and hayland fields at least once every 5 years AND do you use the test results to plan your nutrient application rates?	Yes/No
16.3	Do you apply fertilizers and manures based on established or realistic crop yields from crop records and do you give appropriate credit for nutrients from manure, cover crops, irrigation water, previous crops, or organic matter, as applicable, by using analysis or book values for these sources to plan nutrient application rates and timing?	Yes/No
16.4	Select all that apply when you apply fertilizer or manure.	
	a) incorporate (within 24 hours) or inject manure or fertilizer at least 2 inches deep	
	b) precision agriculture techniques are used in the application of fertilizer and manure.	
	c) apply on 80% residue cover or 80% crop canopy.	
16.5	From choices below (a-d) select the answer that best describes when you apply the majority of nutrients.	
	a) Most of the manure or fertilizer is applied more than one month prior to planting or more than one month prior to "greenup" of perennial crops.	
	b) Most of the manure or fertilizer is applied within one month prior to planting or within one month prior to "greenup" for perennial crops.	
	c) Most of the manure or fertilizer is applied after crop emergence or after annual growth begins (greenup) for perennial crops.	
	d) Most of the manure or fertilizer is applied as a split application (pre-plant & post plant), according to soil tests or crop growth stages. Application split must be at least 50% post emergence.	